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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,980	05/20/2002	Paul A. J. Morris	65008-034	1133
7590	09/13/2006			EXAMINER FISCHER, JUSTIN R
Harold W Milton Jr Howard and Howard Attorneys The Pinehurst Office Center Suite 101 39400 Woodward Avenue Bloomfield Hills, MI 48304			ART UNIT 1733	PAPER NUMBER
DATE MAILED: 09/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/031,980	MORRIS, PAUL A. J.
	Examiner Justin R. Fischer	Art Unit 1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 July 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,5,7-10 and 13-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,5,7-10 and 13-15 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 5, 7-10, and 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As currently drafted, the claims require a "dry bonding film". The original disclosure, however, only defines the bonding as being carried out by coating or film and as such, the amended claim language constitutes new matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Constantine (US 3,655,474, of record) and further in view of Garnish (US 3,634,169, newly cited), and Hall (US 5,457,149, newly cited). Constantine teaches a method of forming a stretchable composite fabric comprising passing a shell fabric

(woven fabric strip) and a backing fabric (interlining) through a fabric treatment apparatus (depicted in Figure 1), applying a compressive shrinkage thereto, and bonding the respective fabrics to one another. The reference further teaches that (a) the composite fabric (combination of shell and backing fabric) can be initially exposed to steam prior to being fed through the fabric treatment apparatus and (b) the retarding roller of the fabric treatment apparatus can be internally heated (Column 3, Lines 30-50, Column 8, Lines 10-23, Column 11, Lines 10-20).

As to the specific method of making a waistband, one of ordinary skill in the art at the time of the invention would have found it obvious to form a waistband using the method of Constantine in view of the disclosure noted above (waistbands are well recognized as being a garment component). It is additionally noted that such composite fabrics are recognized as being used in the manufacture of waistbands. Lastly, as noted above, Constantine teaches that the fabric has some degree of elastic restorability, which may be desirable for many end uses.

In regards to the "dry bonding film", Constantine broadly suggests the use of bonding adhesives. One of ordinary skill in the art at the time of the invention would have found it obvious to use an adhesive film as it is recognized as being a well known and conventional form of bonding adhesives. It is particularly noted that adhesive films are well recognized as providing improvements in handling, accurate alignment, and efficiency, as compared to liquid adhesives, as shown for example by Garnish (Column 1, Lines 5-20) and Hall (Column 9, Lines 5-15).

5. Claims 5, 7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Constantine, Garnish, and Hall as applied in claims 1 and 10 above and further in view of Bauer (US 3,723,217, of record). As noted above, Constantine substantially teaches the method of the claimed invention, including adhesively bonding the respective fabrics. While the adhesive material is not disclosed by Constantine, the claimed material is consistent with the conventional adhesive materials used in the manufacture of similar composite fabric assemblies, as shown for example by Bauer (Column 3, Lines 24-40). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to practice the method of Constantine with the claimed adhesive material, there being no conclusive showing of unexpected results..

Regarding claim 7, Bauer evidences the well-known use of polyamide and polyester materials for the backing layer (Column 2, Lines 67+). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the backing fabric of Constantine from a woven polyamide or a polyester fabric. It is further noted that nylon and acetate are only exemplary in the disclosure of Constantine (Column 3, Lines 50-55).

6. Claims 1, 5, 7, 10, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer and further in view of Constantine, Garnish, and Hall. Bauer discloses a method of forming a bonded textile fabric useful in the manufacture of wearing apparel comprising the steps of arranging an uncured or partially cured adhesive between a first and second fabric, compressively shrinking the assembly by

feeding said assembly through a fabric treatment apparatus comprising a plurality of rollers (applies pressure), and curing the adhesive (bonding) while both fabrics are in a compressed state (Column 3). The reference, however, is silent as to the application of heat. Constantine, on the other hand, teaches an extremely similar method and suggests that effective compressive shrinkage is obtained by exposing the assembly to steam and optionally heating the retarding roller (Column 8, Lines 1-20). As such, one of ordinary skill in the art at the time of the invention would have found it obvious to apply heat in the method of Bauer.

As noted above, Bauer teaches that the composite fabric is usable in the apparel industry- while the reference fails to expressly teach the manufacture of a waistband, one of ordinary skill in the art at the time of the invention would have found it obvious to form a waistband using the method of Bauer in view of the disclosure noted above (waistbands are well recognized as being apparel/garment components). It is additionally noted that such composite fabrics are recognized as being used in the manufacture of waistbands.

As to the respective fabrics, Bauer teaches that they can be knitted, woven, or non-woven and furthermore, that they may be comprised of cotton, wool, polyamides, polyesters, or blends thereof (Column 3, Lines 1-10). One of ordinary skill in the art at the time of the invention would have found it obvious to form one of the layers as a woven fabric and one of the layers from a thermoplastic material- this combination of materials is consistent with composite fabrics used in the apparel industry. It is further

noted that Constantine recognizes the known use of woven fabric layers and thermoplastic interlinings or backing layers.

With respect to the adhesive material, Bauer suggests that liquid adhesives are most useful. This language, however, clearly suggests that additional adhesive forms are well within the scope of the reference. It is particularly noted that adhesive films are extremely well known and commonly used in a wide variety of bonding applications and more particularly, adhesive films are commonly used in place of liquids since they provide advantages in handling, accuracy, and efficiency, as shown for example by Garnish and Hall. It is emphasized that while liquid adhesives might be preferred, the reference in no way excludes the use of adhesive films. Lastly, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the use of adhesive films.

Regarding claim 5, the claimed material/method are consistent with the conventional adhesive materials and methods used in the manufacture of similar composite fabric assemblies (Column 3, Lines 24-40).

With respect to claims 7, 13, and 14, the fabrics can be formed as a woven construction and they can be formed of either polyamide or polyester- one of ordinary skill in the art at the time of the invention would have been able to appropriately selected the desired materials and arrangement depending on the specific article being manufactured.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer, Constantine, Garnish, and Hall as applied in claim 1 above and further in view of the

Admitted Prior Art (Page 4). Bauer discloses a composite assembly formed of at least two plies of the same or different textile fabric (Column 2, Lines 60-66). In this instance, the claim requires a non-woven or knitted material be processed with the composite assembly defined by a woven fabric and a thermoplastic interlining. As noted above, one of ordinary skill in the art at the time of the invention would have found it obvious to form the composite assembly from a woven fabric and a thermoplastic layer in view of the disclosure of Bauer and the known use of such combinations to form a composite fabric usable in the apparel industry. In regards to the inclusion of an additional layer, the APA recognizes that such a layer (rigid non-woven or knitted material- stretch interlining) is commonly included in order to make the waistband fabric (fabric and interlining) more substantial and easier to handle. One of ordinary skill in the art at the time of the invention would have found it obvious to form the assembly as a three layer laminate since the reference teaches a construction of at least two plies and the APA recognizes the specific use of such a layer (rigid non-woven or knitted material) with a composite assembly defined by a woven fabric and a thermoplastic interlining for the benefits detailed above. It is additionally noted that Bauer is broadly directed to the use of a composite fabric in the apparel industry and one of ordinary skill in the art at the time of the invention would have found it obvious to use the composite in a wide variety of environments (including stretch trousers and skirt waistbands- instances where stretch interlinings are conventionally included).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer, Constantine, Garnish, Hall, and the APA as applied in claim 8 above and further in view

of Kavesh (US, 4,819,458, of record) and optionally in view of Dagg (GB, 2,307,167, of record). As noted above, Bauer in view of Constantine disclose a method of laminating a woven fabric to a backing layer or interlining. While Bauer fails to expressly suggest that the woven fabric is tensioned during processing, one of ordinary skill in the art at the time of the invention would have found it obvious to tension said woven fabric since such a technique is extremely well known in the manufacture of clothing articles in order to impart a desired pattern (against direction of shrinkage), as shown for example by Kavesh (Column 1, Lines 37-50 and Column 4, Line 58 – Column 5, Line 20). Dagg is optionally applied to further evidence the well known use of tensioning during bonding of fabric layers in the manufacture of clothing articles (Page 8, 2nd Paragraph). Thus, tensioning is recognized in the clothing industry as a suitable processing technique when dealing with shrinkable fabrics, there being no conclusive showing of unexpected results to establish a criticality for the claimed tensioning.

Response to Arguments

9. Applicant's arguments filed July 10, 2006 have been fully considered but they are not persuasive.

Applicant argues that Constantine and Bauer teach wet bonding techniques and thus teach away from the use of a dry bonding film. However, as detailed above, adhesive films are recognized as being a well-known and conventional form of adhesives and more importantly, they are well recognized as providing improvements in handling, accuracy, and efficiency, as compared to liquid adhesives. It is further noted that Constantine and Bauer do not teach away from using adhesive films but rather

disclose liquid adhesives as being preferred. In particular, Bauer expressly states that liquid adhesives are the most useful- this language clearly suggests that additional adhesive forms, while not being preferred, are within the scope of the reference.

Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use an adhesive film in the method of Constantine or Bauer.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is (571) 272-1215. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Justin R Fischer
Primary Examiner
Art Unit 1733

JRF
September 11, 2006